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## C-A OPERATIONS PROCEDURES MANUAL

### 8.1.10 Tank Quadrupole Turn On

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#### Hand Processed Changes

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Approved: \_\_\_\_\_ ***Signature on File*** \_\_\_\_\_  
 Collider-Accelerator Department Chairman Date

V. LoDestro

## **8.1.10 Tank Quadrupole Turn On**

### **1. Purpose**

To provide instructions for Linac staff on how to turn on the pulsed tank quadrupole power supplies.

### **2. Responsibilities**

Linac staff are responsible for turning on the tank quads.

### **3. Prerequisites**

3.1 The C-A Control System shall be operational.

3.2 Tank water must be on.

3.3 The Linac Operations Coordinator shall be informed of the turn on, as well as any problems encountered during turn on which could lead to significant delays.

3.4 Qualified and trained Linac staff.

### **4. Precautions**

Do not operate supplies with doors or access panels removed.

### **5. Procedure**

Power supplies and controls for quadrupoles in each tank are located along the lower equipment bay. The following turn on procedure must be done for each of the 9 tanks.

5.1 Check that the main 460 VAC disconnect switch is on. This is located on the upstream end of each station, and is labeled "For Quad PS Only".

5.2 Turn on the two main breakers on the back door of the ACME PS's.

5.3 Check that all quadrupole malfunction lights are blinking (indicating that all malfunction circuits are working).

5.4 If the quad turn on switch does not indicate a malfunction, clear the "Local Lock" and turn on the supplies. If a "Remote Lock" is indicated, then this must be cleared by the appropriate tank quad switch in the Linac control room, rack F7. If a malfunction is indicated, check that the tank water is on.

5.5 Check to make sure that the spreadsheet settings, for the appropriate user, for all tank quadrupoles, are at the last saved archived values. File Linac-Quads has all tank quads setting & readbacks.

5.6 In about 2-5 minutes after turn on of the supplies, all malfunction lights should be out. If a light remains on, check the corresponding pulsed supply. If a supply is bad, turn off all supplies for that tank, and follow the spare replacement procedure.

**6. Documentation**

None

**7. References**

None

**8. Attachments**

None